

**This Briefing is Classified**  
**UNCLASSIFIED**



# ***DoD Response in a Public Health Emergency***

**Amy Kircher, MPH,  
CHES  
N-NC SG**

**UNCLASSIFIED**





# ***NORAD and USNORTHCOM***

## ***101***

## **NORAD**

- **Who we are**
- **What we do**
- **Examples**

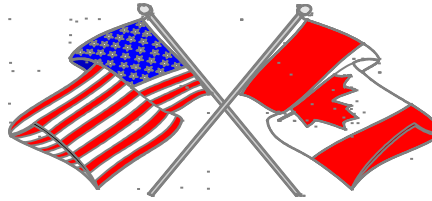
## **NORTHCOM**

- **Who we are**
- **What we do**
- **Examples**





# ***NORAD's Mission***



**“NORAD will conduct air operations within its assigned area of operations to deter, prevent, and, if necessary, defeat hostile air attacks on North American territory, population and designated critical infrastructure.”**

**Aerospace  
Warning**

**Aerospace  
Control**





# ***NORAD - Who we are***

- **NORAD**

- **Bi-National Command**
- **Established in 1958**
- **Commanded by U.S. Flag Officer and Canadian Flag Officer Deputy**



**Peterson AFB**



**Cheyenne Mountain AFS**

- **Purpose: Defense of North American Aerospace**

CMOC



- **People**

- **340 people at HQs**
- **33% Canadian**

**CANADIAN  
NORAD  
REGION**



**CONUS  
NORAD  
REGION**



**ALASKAN  
NORAD  
REGION**







# *Where we operate*





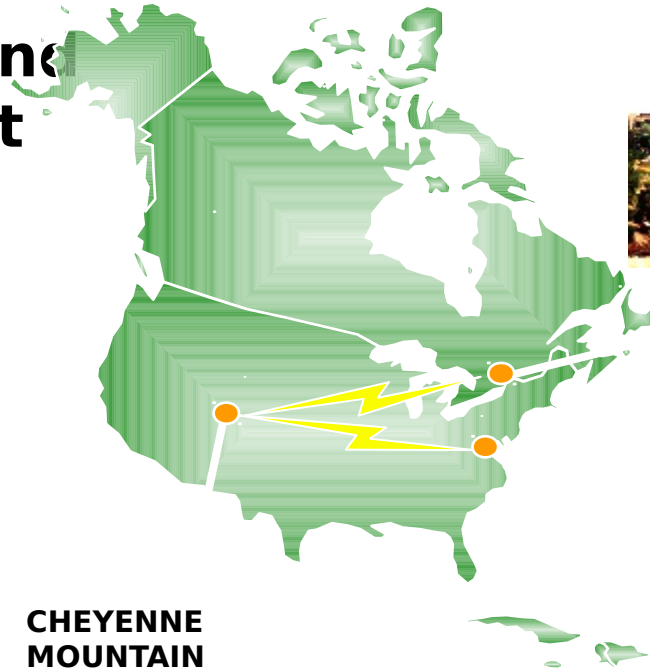


# ***Aerospace warning***

- **Detect, characterize, and warn of attacks against North America**

- **Hostile aircraft**
- **Ballistic missiles**
- **Space vehicles**

- **Provide threat assessment to the Prime Minister of Canada and President of the United States**



OTTAWA

CHEYENNE  
MOUNTAIN



WASHINGTON D.C.







# ***Aerospace control***

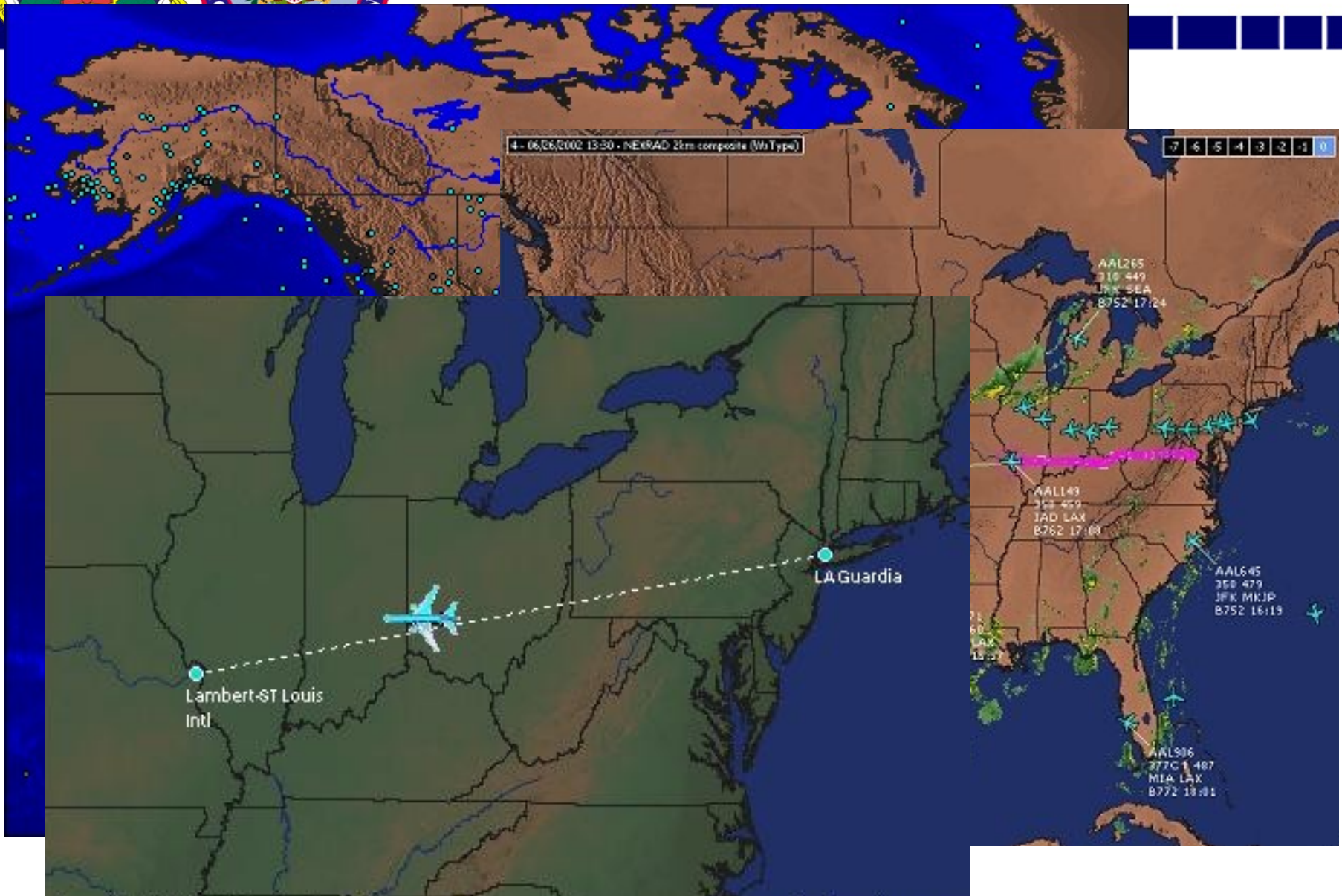
- **Uphold our Nations' right to air sovereignty**
  - **Serve as a deterrent to potential threats**
- **Conduct air defense operations, should deterrence fail**
- **Operation NOBLE EAGLE**
  - **NORAD's air defense response is our "last option"**
  - **First line of defense is airport security, passenger**







# NORAD's changed mission







# ***Why **NORTHCOM**?***

## ***The Catalyst***

**Shanksville, PA**



**Washington, D.C.**



**New York City**







## ***NORTHCOM's mission***

- **Conduct operations to deter, prevent and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility;**
- **As directed by the President or Secretary of Defense, provide military assistance to civil authorities including consequence management operations.**





# ***Not a new mission***

- **“... against all enemies, foreign and domestic...”**
- **Millions of service members have been taking this oath for many years.**





# ***Our Area of Responsibility***







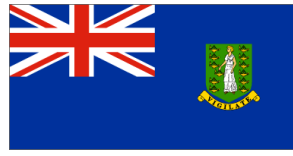
# ***Who's in the Area of Responsibility ?***



**Bahamas**



**Bermuda**



**British Virgin Islands**



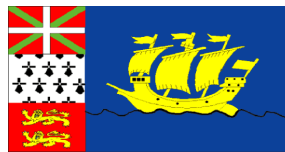
**Canada**



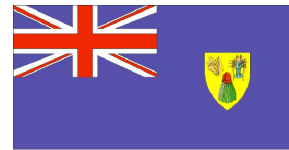
**Cuba**



**Mexico**



**St Pierre & Miquelon**



**Turks & Caicos Islands**



**United States**

**NORTHCOM's Area of Responsibility (AOR) includes U.S. territories, island nations and European possessions. Alaska is in the AOR. Alaskan forces and the State of Hawaii remain within U.S. Pacific Command's AOR. Our AOR does not include Greenland**





# Organization



**ADM Keating**  
**Commander, NORAD**  
**and USNORTHCOM**



**JOINT TASK  
FORCE  
CIVIL SUPPORT**



**JOINT TASK  
FORCE**



**JFHQ NATIONAL  
CAPITAL REGION**



**CMOC**



**NORTHAF**



**ACC**

**ARNORTH**



**FORSCOM**

**MARFORNORTH**



**MARFORRES**

**NAVNORTH**



**CFFC/LANTFLT**

**A regional unified  
command for  
homeland  
defense**



# Our Partners



**Department of  
Homeland  
Security**



**President of the  
United States**



**Federal  
Emergency  
Management  
Agency**



**National Guard  
Bureau**



**U.S. Coast Guard**



**U.S. Department  
of State**



**U.S. Department  
of Transportation**



**Sandia National  
Laboratories**



**National  
Aeronautics and  
Space  
Administration**



**Central  
Intelligence  
Agency**



**Federal Bureau of  
Investigation**



**Transportation  
Security  
Administration**



**Environmental  
Protection  
Agency**



**Federal Aviation  
Administration**



**U.S. Geological  
Survey**



**Bureau of  
Reclamation**



**General Services  
Administration**



**U.S. Department  
of Agriculture**





# *How we operate*

- **Homeland Defense**



- **Homeland Security is a national effort**







*Only when directed*

**Provide  
military  
assistance to  
civil  
authorities  
when  
requested and  
when  
directed.**







# ***Who does what and when***



**FEDERAL**  
**L**  
**STATE**  
**LOCAL**





# *Assistance to Civil Authority*

- **Special skills**
- **Special equipment**
- **Communications**
- **Information sharing**







# *Some Examples*



**State of the  
Union Address**



**Wildland  
Firefighting**



**National  
Political  
Convention  
s**



**G-8 Summit**



**Space  
Shuttle  
Columbia**



**Hurricane  
Relief**



**Ricin Incident**



**Washington,  
D.C. Sniper**



**Multi-agency  
Exercises**



**Homeland  
Security  
Advisory System**20





# ***What We Don't Do***

- **Not the police auxiliary**
- **Don't take the lead over federal, state, or local agencies**
- **Don't create policy or allocate resources**





# ***SG Response***

## ***NORAD - USNORTHCOM SG Roles and Responsibilities***





## ***SG Mission***

**The N-NC Surgeon's Office improves DOD mission effectiveness throughout the spectrum of “deter, prevent, defeat and mitigate” for this Area of Responsibility by anticipating health threats, planning, coordinating and exercising with other federal and civilian agencies and reducing vulnerabilities. The surgeon's office advises the commander on Force Health Protection and the execution of medical consequence management activities.**





# ***SG Team Mission***

- **Advise** NORAD-USNORTHCOM CDR and staff on all medical issues...with broad interpretation of “medical”
- **Anticipate**, as much as possible, threats of disasters, natural or otherwise
- **Forge plans and relationships *before* the event**
  - Understand and provide key support to components
  - SG role in the deter, prevent, defeat phase
  - Pre-event consequence management planning
- **Coordinating DoD medical response *during and after* event** as requested by local, state, and other federal agencies
  - Within DoD and across all agency boundaries
  - Full range of consequence management
- **Attend to the health and welfare** of the people in the commands
- **Make the system better every day**





# ***How We Fit into NORTHCOM***

- **Conduct operations to *deter, prevent, and defeat* threats and aggression aimed at the United States, its territories, and interests within the assigned area of responsibility; and,**
- **As directed by the President or Secretary of Defense, provide military assistance to civil authorities including consequence management operations**

***Deter...Prevent...Defeat...Mitigate***





# ***Roles and Responsibilities (1 of 2)***

- **Advise Commander and staff on Health Service Support (HSS) issues**
- **Provide medical support in the Adaptive HQ (CEB, JOG, JPG, etc)**
- **Provide planning and coordinating functions with other J-codes**
- **Develop relationships with health authorities for full spectrum operations (before-during-after)**
- **Maintain the health of the command**





# ***Roles and Responsibilities (2 of 2)***

- **Specific HSS functions**
  - **Disease and environmental threat assessment**
    - **Theater health surveillance programs**
    - **Public Health and Preventive Medicine**
  - **Force Health Protection (countermeasures to the threat)**
  - **Agricultural terrorism**
  - **Health Sector CIP**
  - **Medical Operations Cell/Center (MOC)**
  - **Health service support planning for command missions**
  - **Recommend activation and manage DODs portion of the National Disaster Medical System (NDMS)**
  - **HSS input to the USNORTHCOM CONOPs and Bi-national Planning Group**
  - **Joint Regional Medical Plans and Operations**



# Communication & Collaboration



## STRATEGIC NATIONAL

OASD(HD)

OASD(HA)

J4-HSSD

JDOMS

JFCOM

SERVICE SG'S

TRANSCOM SG

## STRATEGIC THEATER

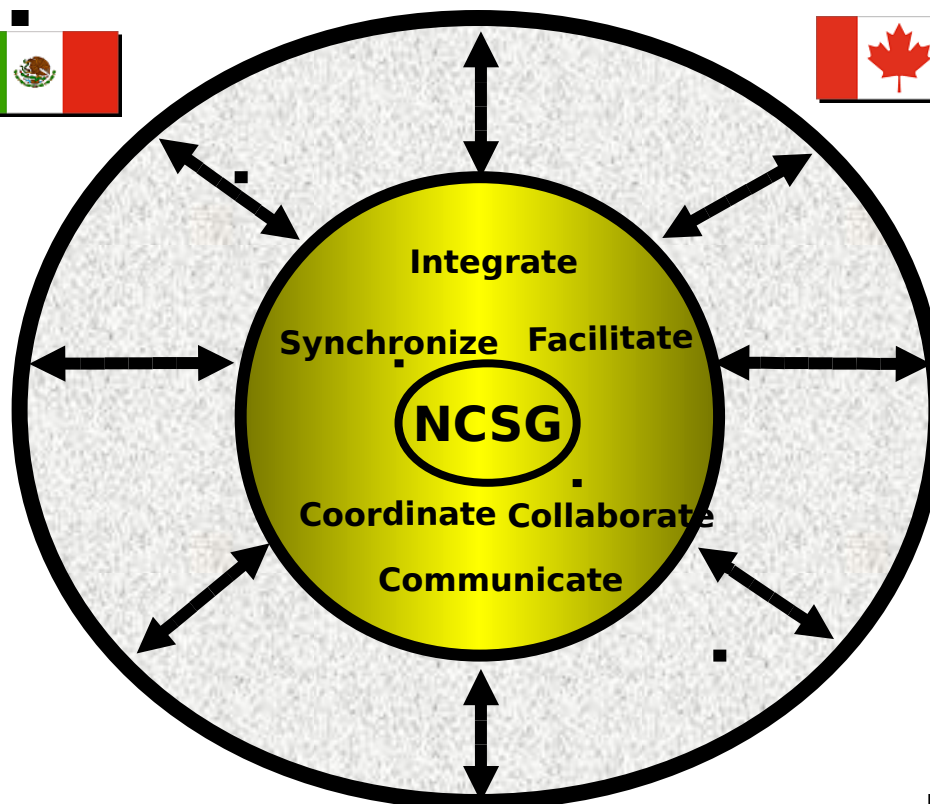
NC STAFF

ARNORTH

NAVNORTH

NORTHAF

MARFORRES



## OPERATIONAL

JFLCC

TF  
EAST & WEST

JFMCC

NAVNORTH  
EAST & WEST

JFACC

JTF-NCR

JTF-ALASKA

SJFHQ-N

JTF-CS

JTF-NORTH

## INTERAGENCY

DVA

DHS/NDMS

DHHS/CDC

GUARD, RESERVES

ACADEMIA, INDUSTRY, MEDICAL ORGS, STATES





# Command Surgeon Directorate

As of 1 August  
2005

**Command Surgeon**  
**COL Powell, MC,**  
**USA**

**Deputy**  
**Command Surgeon**  
**Col Maguire, NC,**  
**USAF**

**Administration**  
**Col Maguire, NC,**  
**USAF**

**HSS Plans and Operations**  
**CDR Macchi, MSC, USN**

**Medical**  
**Operations**  
**Cell (MOC)**

**Preventive Medicine &**  
**Force Health Protection**  
**Lt Col Gregorio, MSC,**  
**USAF**

**Joint Regional Medical Plans & Operations**  
**Division**  
**CDR McLean, MSC, USN**





# ***Future Operations Division***

- **Medical Operations Cell/Center**
- **Theater Medical Plans**
  - **For Homeland Defense**
  - **For Civil Support**
- **National Response Plan inputs (as it relates to health and medical issues)**
- **National Disaster Medical System Preparedness and Execution**
- **Bi-national Planning**
- **HSS input to USNORTHCOM CONOPs**





# Joint Regional Medical Plans & Operations Division

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- USNORTHCOM Assets
- Regional, State, Federal Response Plans
- Emergency Response Planning, Training and Exercises (*National Security Special Events*)
- Emergency Response Operations
  - Supports DCO as part of the DCE
- Relationship Building
- Joint Medical Service Expertise:
  - Knowledge and experience of military and civilian regional plans/capabilities (MOU/MOA/...)
  - Immediate Forward Deployed Response Capability
  - Exercises with local, city, state, federal and DoD medical response agencies
  - Interagency Medical Expertise

BY ORDER OF THE COMMANDER  
UNITED STATES NORTHERN COMMAND



USNORTHCOM INSTRUCTION 49-206  
1 JUNE 2004

Medical Command

JOINT REGIONAL MEDICAL PLANS AND  
OPERATIONS PROGRAM - NCSGJ

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFSPC WWW site at:  
<https://midway.peterson.af.mil/pubs/northcom/index.htm>

OPR: NCSGJ (MAJ Nick Cressy, MS, USAR)

Certified by: NCSGJ (CDR Stewart Smith,  
MSC, USN)  
Pages: 13  
Distribution: F

This instruction implements guidance from the Unified Command Plan signed by the President of the United States on 30 April 2002 and effective 1 October 2002 establishing U.S. Northern Command (NC) responsibilities, which included the transfer of the Joint Regional Medical Plans and Operations Program from US Joint Forces Command (USJFCOM). The Joint Regional Medical Plans and Operations Program include organization, general and special duties and responsibilities, operational concepts, command relationships, service support tasks, minimum training requirements, and authorities. This instruction is applicable to U.S. Northern Command (NC) and NC subordinate organizations. It will also prove useful to North American Aerospace Defense Command (NORAD), USJFCOM, associated Service components, the Services, designated Joint Force Commanders (JFC's), other Unified Commands and Defense Agencies, the Joint Staff, the Department of Defense (DoD), other federal agencies, and applicable local and state authorities during activities involving planning, training, exercising, military contingencies, or military assistance to civil authorities (MACA). This instruction applies to National Guard or Reserve units when assigned to USNORTHCOM.

1. REFERENCES. See [Attachment 1](#).

2. BACKGROUND. See [Attachment 2](#).

3. EXPLANATION OF TERMS. See also, [Attachment 1](#).

3.1. Joint Regional Medical Planner and Operator (JRMPO). In the context of this instruction, a JRMPO is an officer from the Army, Navy, or Air Force with training and experience in medical readiness planning and operations. These officers operate from one of four regional branch offices. JRMPO's have knowledge of the medical capabilities of their parent service, other services, regional federal and civilian health service support (HSS) capabilities, and can effectively and efficiently match capabilities with requirements. Due to the emphasis on domestic response issues, JRMPO's

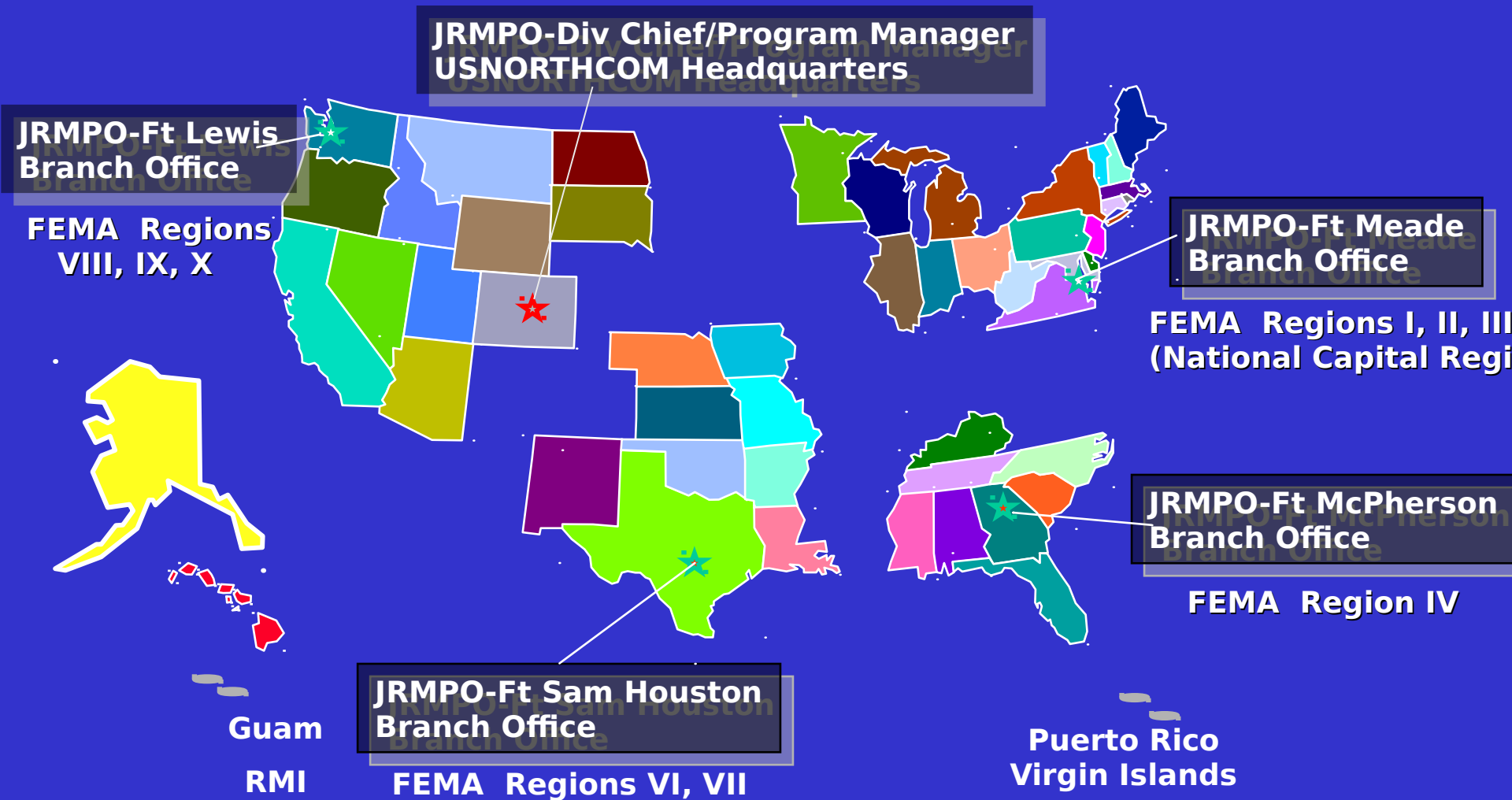
***Paragraph 6.3.4 - "Integrate with key organizations within DoD and other Federal agencies to provide continuous situational awareness to the DCO and/or the JFC before, during and after incidents requiring MACA support for the Consequence Management response"***

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# Joint Regional Medical Plans & Operations Offices







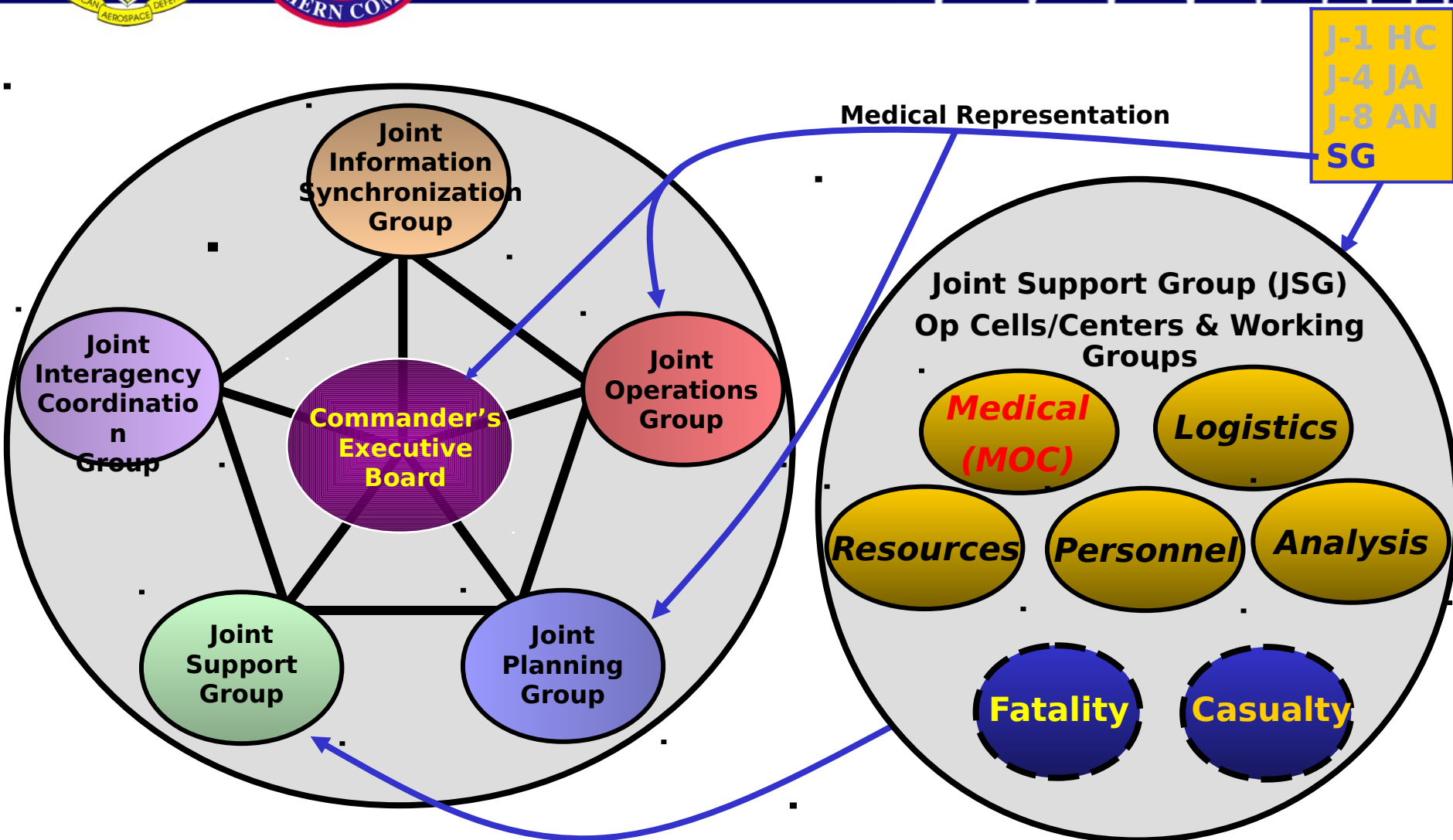
# ***Current Operations Division***

- **Force Health Protection**
- **Agricultural Terrorism**
- **Health Sector Critical Infrastructure Protection**
- **Immunizations**
- **Prophylaxis**
- **Disease countermeasures**
- **Movement restrictions**
- **CBRNE Health Risk Assessment, Surveillance and Mitigation**
- **Health Sector Theatre Security Cooperation**
- **Disease Surveillance**
- **Disease Modeling and Simulation**





# Transition to an Adaptive HQ







# ***MOC Roles and Responsibilities***

- **Under the direction of the NORAD - USNORTHCOM Surgeon**
- **Capable of performing 24/7 operations**
- **Characterizes disease and environmental threats for adaptive operational cells/centers**
- **Provides force health protection guidance to DOD components within the theater of operations**
- **Provides situational understanding for HSS issues**
- **Synchronizes HSS efforts within the adaptive operational cells/centers to improve organizational efficiency**
- **Coordinates HSS for USNORTHCOM during a HLD and/or CS events**
- **Operates as a functional component of the JSG for health service support issues**





# ***Current Operational Response***



# Participant Flow



**I  
N  
C  
I  
D  
E  
N  
T**

## Local

**Mayor/County Executive**



**Incident Commander and First Responders**

## State

**Governor**



**State Emergency Management**



**State Coordinating Officer**

## Federal

**DHS (FEMA)**



**Emergency Response Team**



**Federal Coordinating Officer**

## DOD

**Secretary of Defense**



**U.S. Northern Command / US Pacific Command**



**Response Units**

Joint Field Office

**SCO**

**FCO**

**DCO**





# *The Process*

*An Incident Occurs...*



# Local Response



Units of  
Capability

**Local Resources Are Overwhelmed**

**Local Response**

First Responders  
Primary Care Providers  
Labs  
Health and Medical Treatment Facilities

Public Health Departments  
Local EOC's  
Other federal health and medical  
DOD Medical Response Forces

**Time**

**Medical Sustaining Forces (Positioned East and West)**

Deployable Hospitals  
Casualty receiving ships  
DOD Medical Response Forces  
A transformed IEF  
NDMS assets (Patient Mvt and Hosp)

**DOD MEDICAL RESPONSE FORCES AT THE INSTALLATION LEVEL**

MTF's  
DISEASE  
INVESTIGATION  
VACCINATION  
PREVENTIVE MEDICINE

VETERINARY SERVICES  
MEDICAL LOGISTICS DISTRIBUTION  
MENTAL HEALTH  
PATIENT DECONTAMINATION





# State & Regional Response



Units of  
Capacity

State and Regional Resources are Overwhelmed

## State and Regional Response

WMD-CST's  
NG CERFP  
\* NG EMEDS+25 - Kansas  
NGB Medical Response Assets

State Health Departments  
State EOCs  
SJFHQ-State  
SEPLOs  
Title 10 DCO or T10/32 JTF  
Regional medical C2

First Responders  
Primary Care Providers  
Labs  
Health and Medical Treatment Facilities

Public Health Departments  
Local EOC's  
Other federal health and medical  
DOD Medical Response Forces

## Local Response

Time

### Medical Sustaining Forces (Positioned East and West)

Deployable Hospitals  
Casualty receiving ships  
DOD Medical Response Forces  
A transformed IEF  
NDMS assets (Patient Mvt and Hosp)

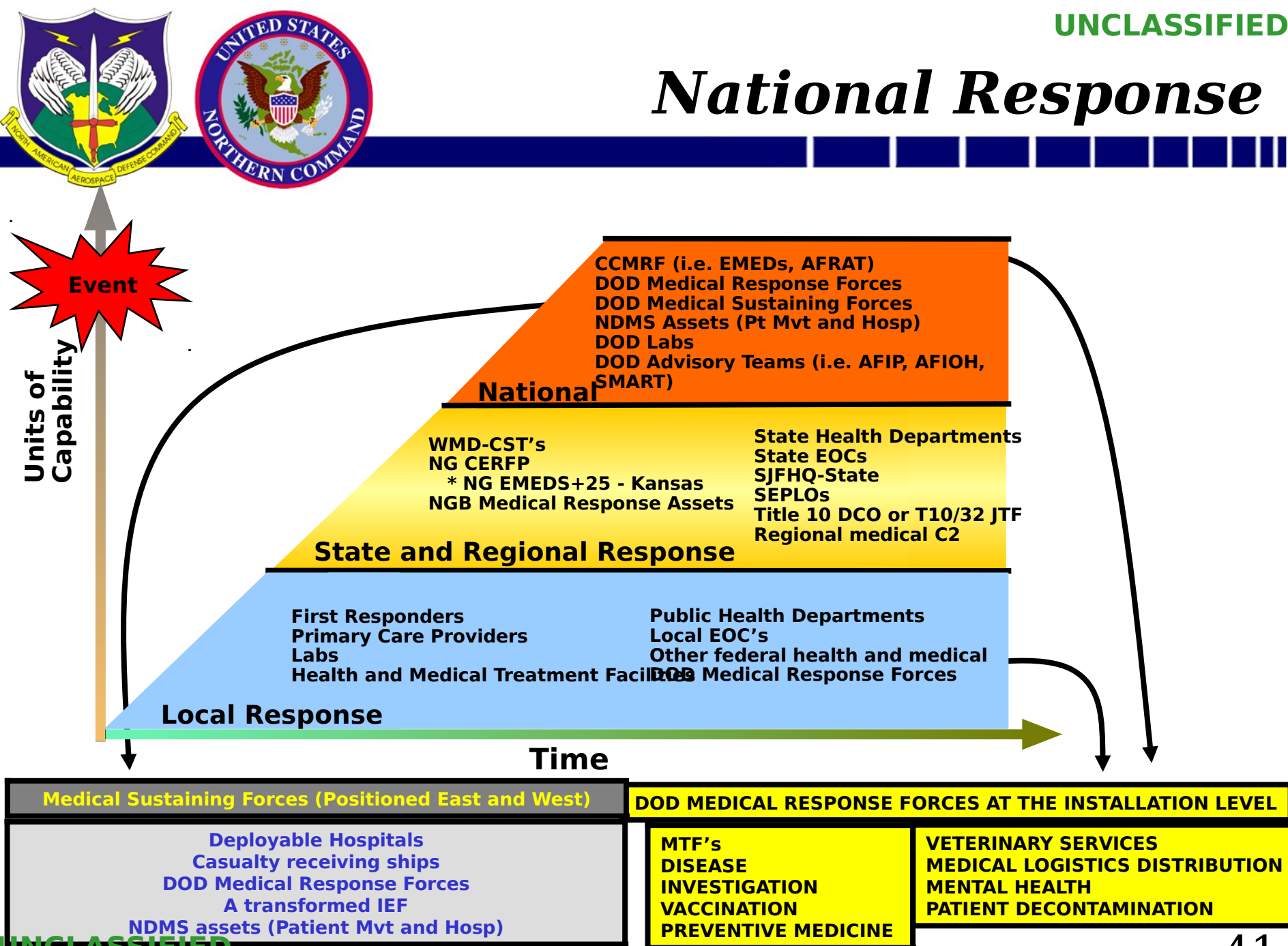
### DOD MEDICAL RESPONSE FORCES AT THE INSTALLATION LEVEL

MTF's  
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VETERINARY SERVICES  
MEDICAL LOGISTICS DISTRIBUTION  
MENTAL HEALTH  
PATIENT DECONTAMINATION



# National Response

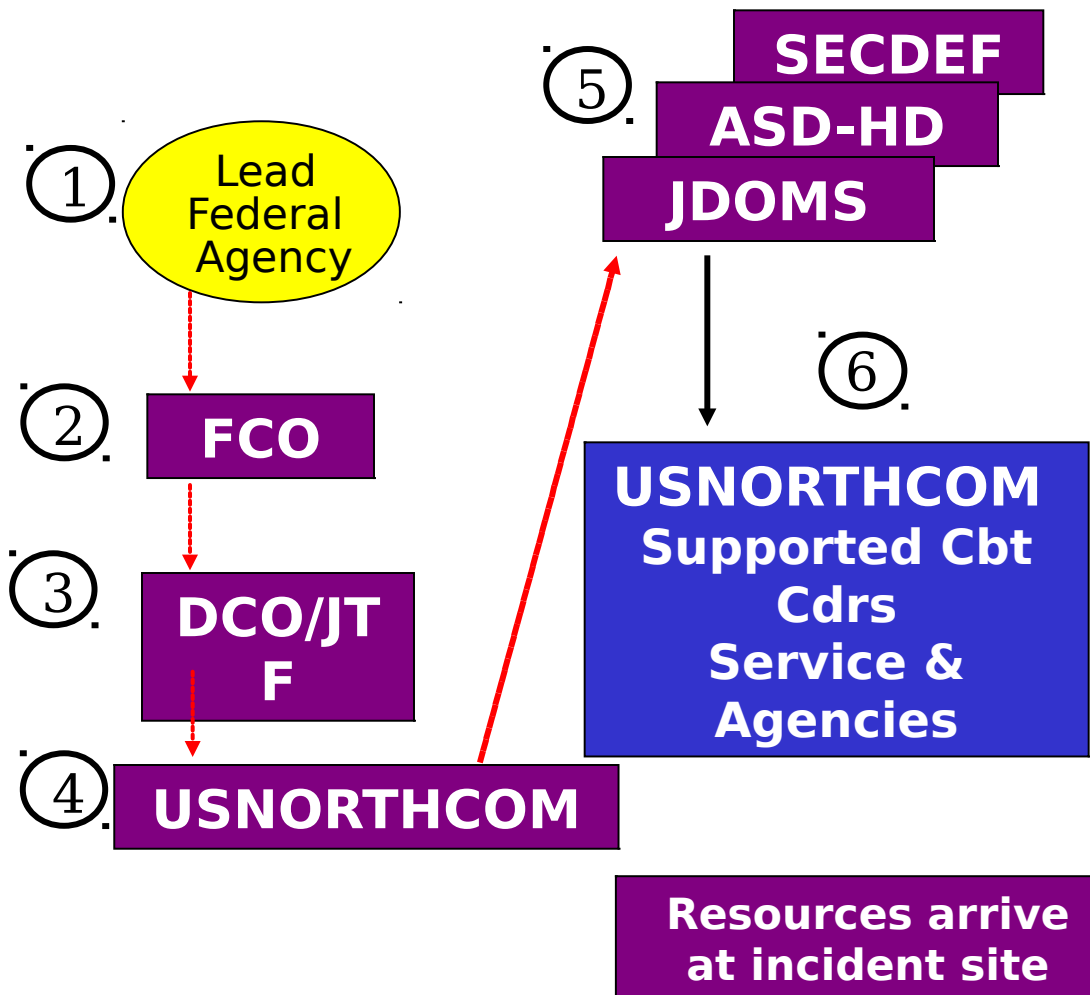






# ***Request for Assistance (RFA)***

1. **Lead Federal Agency (LFA) initiates Action Request Form (ARF) [WARNORD]; coordinated through all ESFs in FEMA PFO**
2. **ARF sent to Federal Coordinating Officer (FCO) for tasking and allocation of funds**
3. **FCO sends ARF to Defense Coordinating Officer (DCO). If validated by DCO, ARF becomes Mission Assignment (MA). MA is evaluated by DCO/JTF CDR against existing EXORD & assets assigned. IF capability is on hand or inbound, MA is executed. IF MA cannot be satisfied, it is forwarded to NC. The JTF CDR and DCO do not develop Request For Forces (RFF) for an MA.**
4. **NC reviews MA and sends to JDOMS for ASD-HD validation and SECDEF approval.**
5. **SECDEF approves or disapproves**
6. **Upon SECDEF approval, JDOMS issues EXORD to NORTHCOM, JFCOM, TRANSCOM & Services as applicable.**
7. **NC follows up and ensures required**





***Amy Kircher***  
***amy.kircher@northc***  
***om.mil*** Questions?





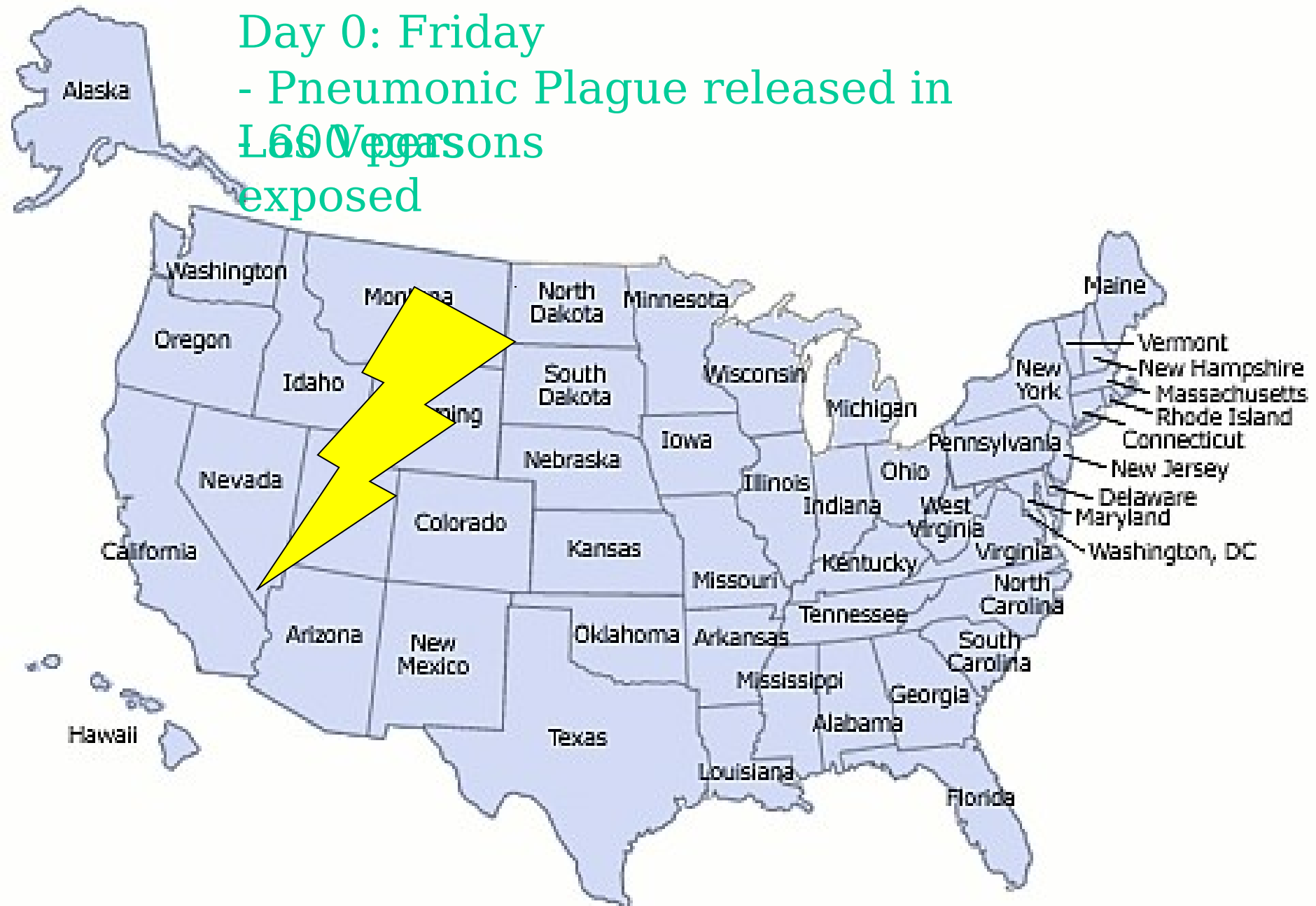


# *Threat Characterization to Recovery*

**Threat Characterization  
Predictive Modeling  
Resource Estimation**



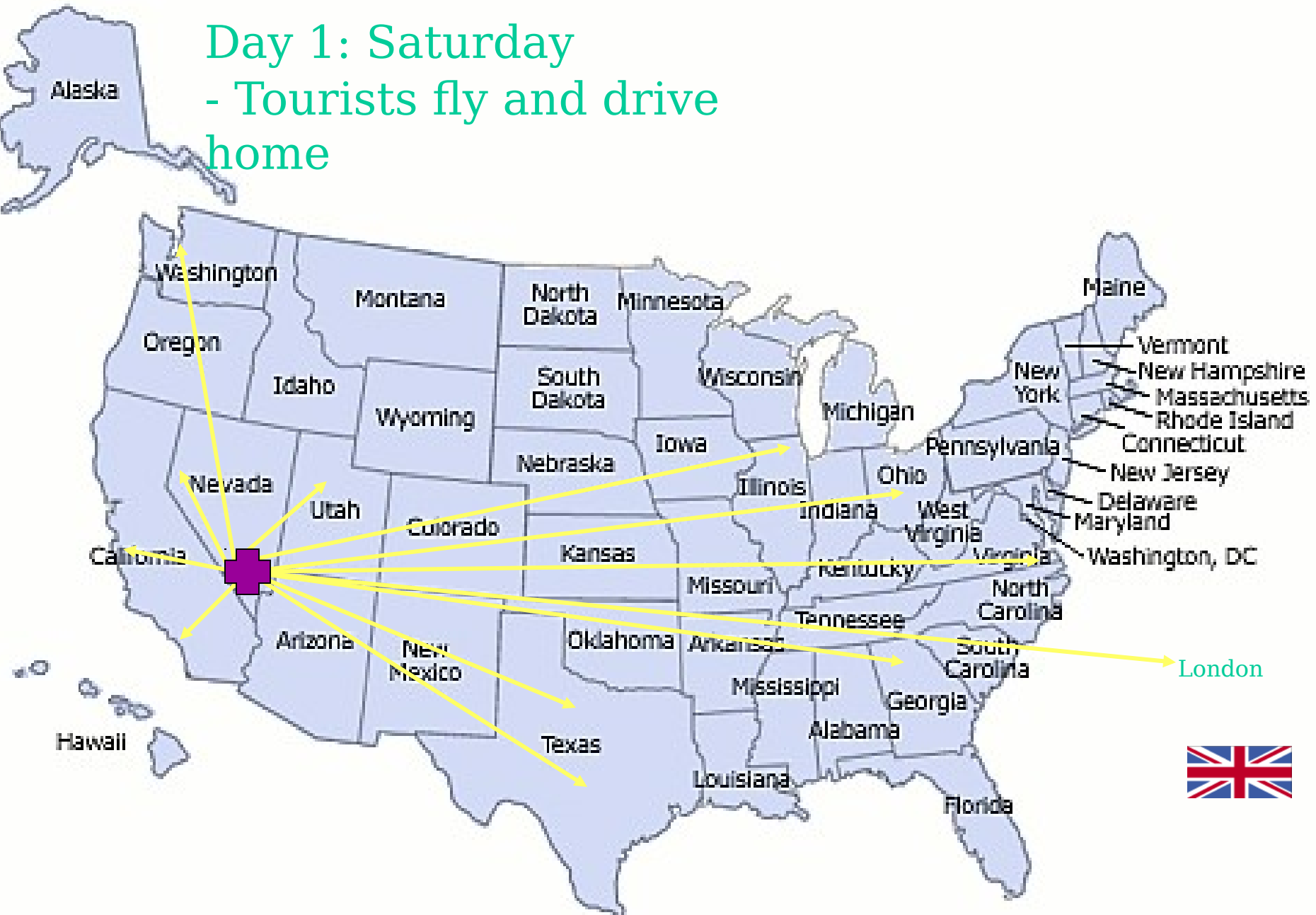
Day 0: Friday  
- Pneumonic Plague released in  
Las Vegas  
600 persons  
exposed





# Day 1: Saturday

- Tourists fly and drive home





# Day 2: Sunday

## - Tourists fly and drive home

### Illness begins to be reported



Edmonton

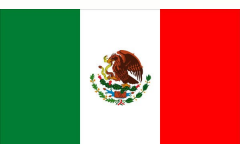
International Airport of Canada



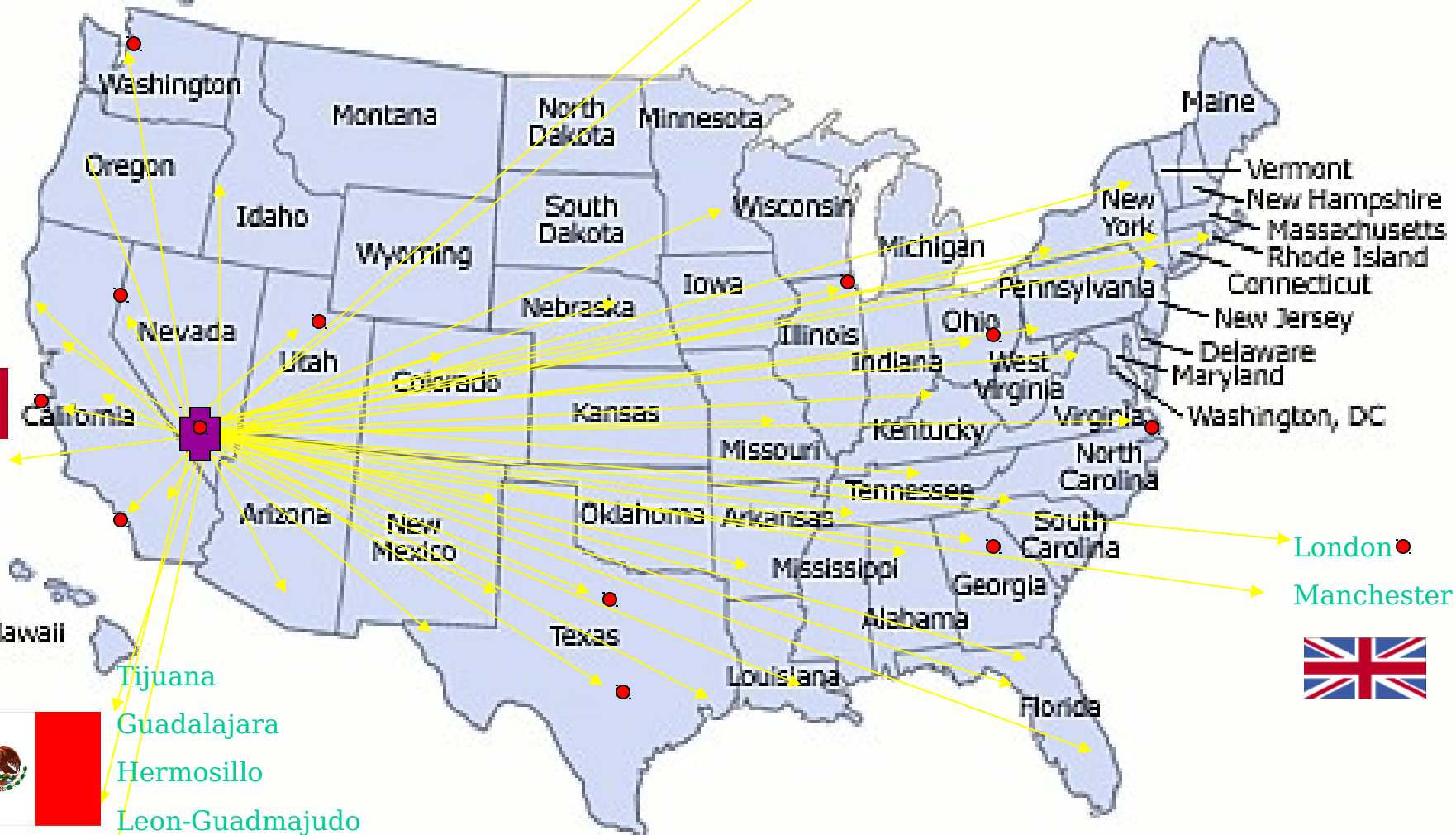
Alaska



Hong Kong



Tijuana  
Guadalajara  
Hermosillo  
Leon-Guadajardo  
Mexico City  
Monterrey



London  
Manchester



Day 3: Monday

- Tourists fly and drive

and additional illness is reported

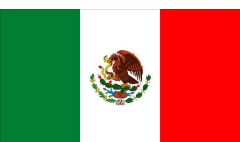


Edmonton

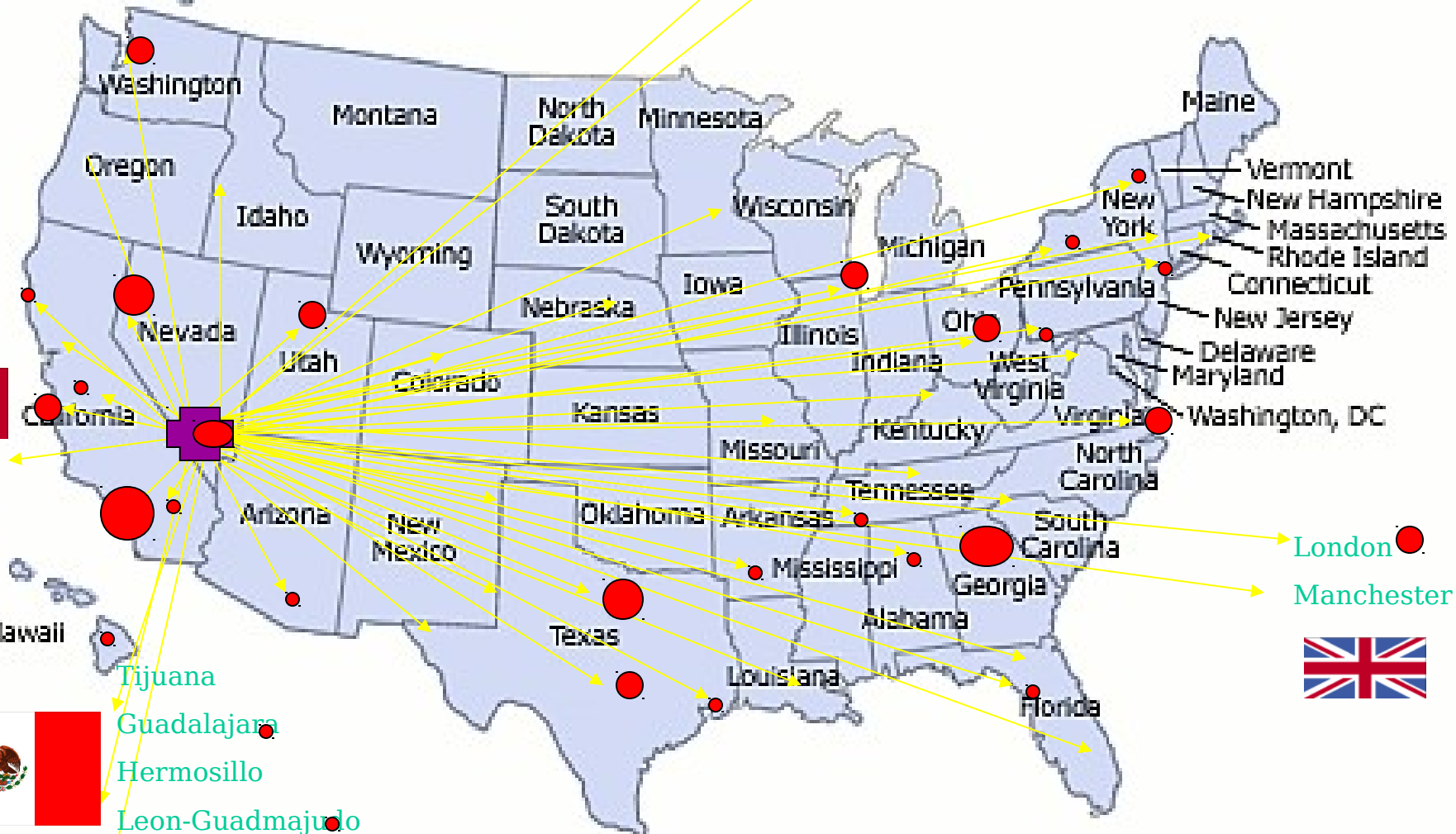
International Airport of  
Canada



Hong  
Kong



Tijuana  
Guadalajara  
Hermosillo  
Leon-Guadajardo  
Mexico City  
Monterrey



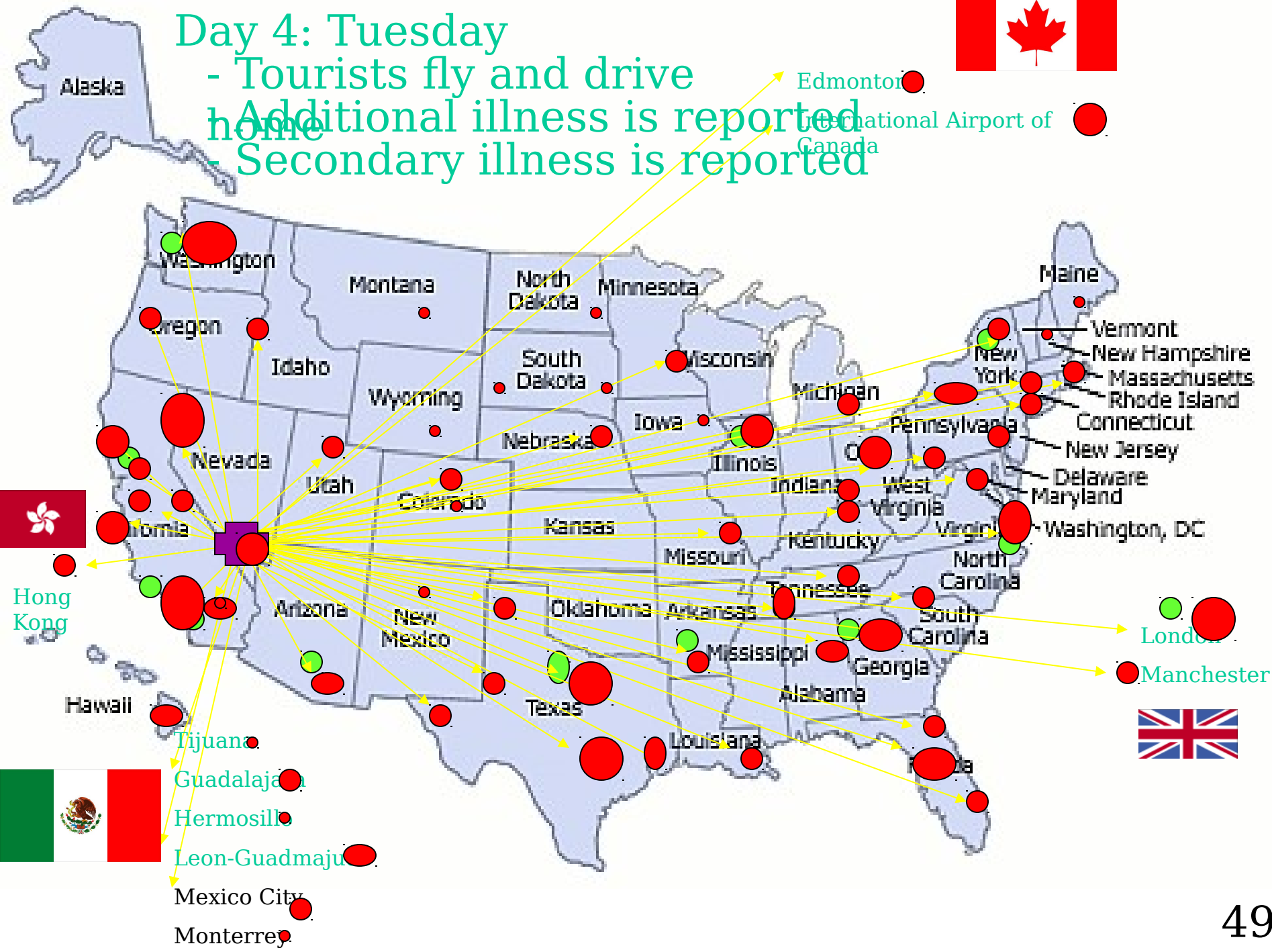
London  
Manchester





## Day 4: Tuesday

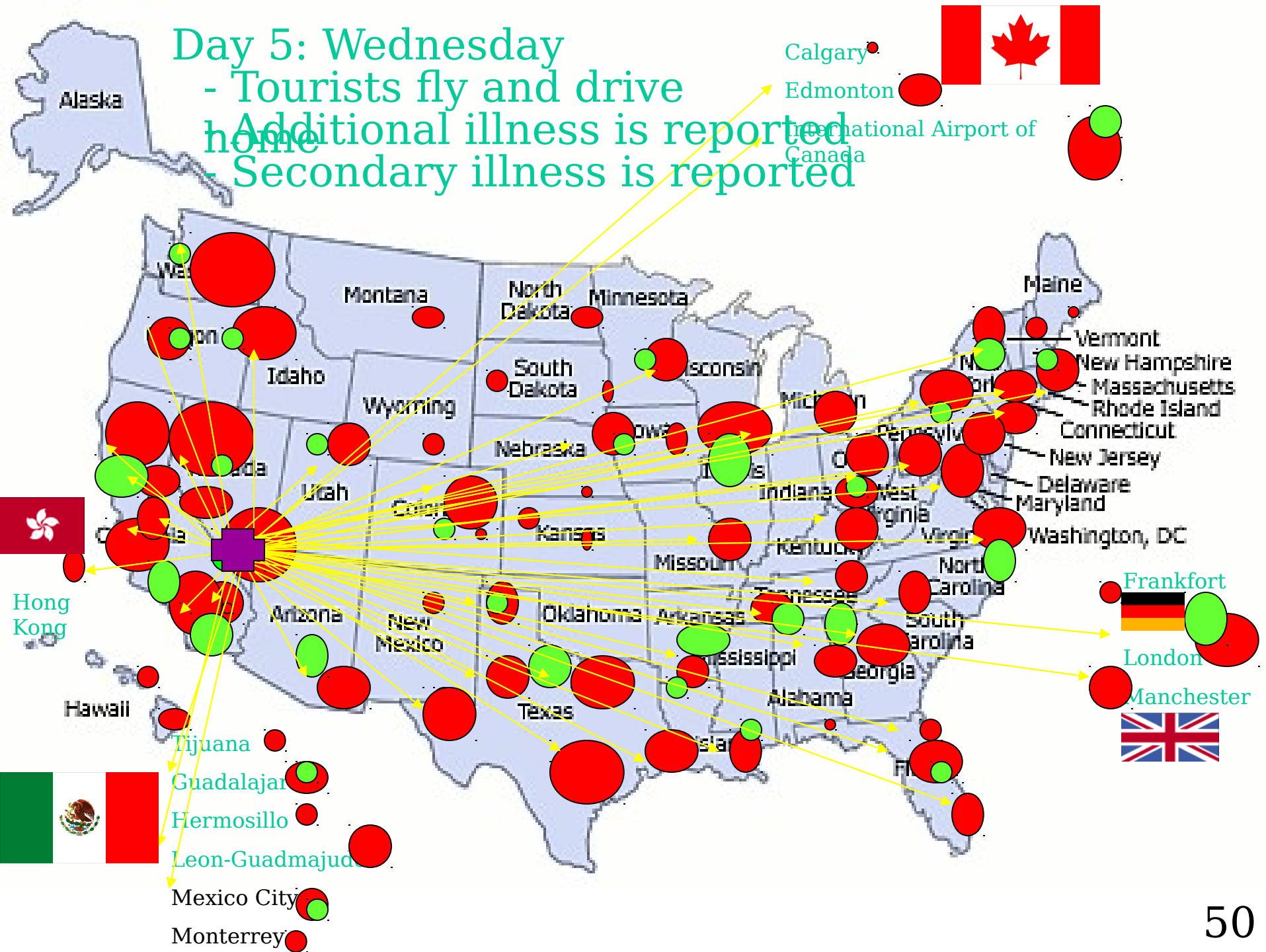
- Tourists fly and drive home
- Additional illness is reported
- Secondary illness is reported





## Day 5: Wednesday

- Tourists fly and drive home
  - Additional illness is reported
  - Secondary illness is reported
- 
- The diagram illustrates the spread of illness. A central box labeled 'Edmonton' has two arrows pointing outwards. One arrow points to a box labeled 'International Canada', and the other points to a box labeled 'Edmonton'. This represents the initial spread of illness from the source to tourists and then to their home countries.







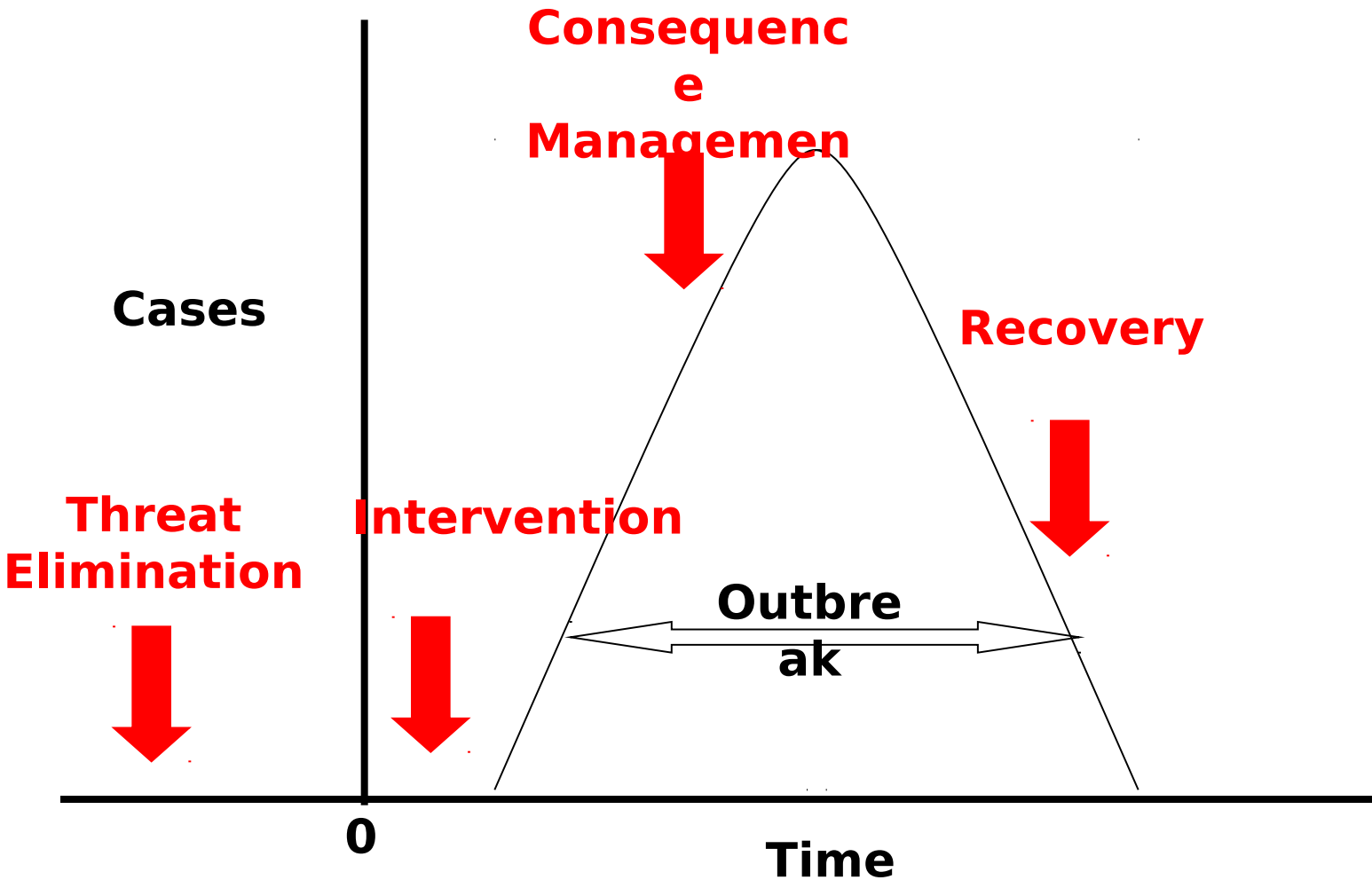
# ***What is the Need?***

Early warning of biological event to allow for appropriate intervention (HLD) and effective consequence management (HLS)





# *The Event*







# ***Solution***

National Biosurveillance Integration System (NBIS)

DHS sponsor; Federal agencies support

Receive, process, and analyze information

Identification of threat for dissemination

NORTHCOM Data Fusion Cell

Maintain Command situational awareness

Provide early warning

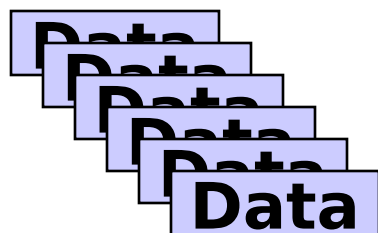
Make FHP recommendations

Deterrence with knowledge

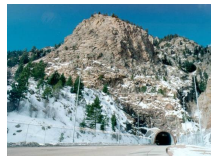




# How Does it Work?



**NBIS**



**Data Mining**



**Analysis**



**Includes NC/SG analysts**



**Threat Identified**



**Protecting Sources and Methods**



**DoD**



**DHS**

**Other Fed**



**Community**







# ***Epidemiologic Modeling***

## **REQUIREMENT**

**To Produce Epidemiologic Data,  
That Provides Casualty Generation Over Time,  
 morbidity (Degree of Severity) and Mortality Numbers  
To determine  
Impact on Available Medical Resources,  
Identification of Medical Shortfalls  
That Would Generate a Federal Response  
And Subsequently A DoD Response**





# Epidemiologic Modeling

DRAFT

- Pathogen
- Location (s) of release
- Civilian Population
- Military Population
- Weather
- Dissemination Vehicle
- Civilian response capabilities
- Military response capabilities
- Civilian transportation capabilities
- Military transportation capabilities
- Availability of assets
- EMACS ?



- # of civilian casualties (severity)
- # of military casualties (severity)
- Location of casualties
- Resource estimation (civilian/military)
  - Personnel
  - Equipment
- Intervention
  - Prophylaxis
  - Treatment
- Transportation requirements





# ***Resource Estimation***

## **Medical Resources**

- **Personnel**
- **Medical Facilities**
  - **Beds - Type of Beds (ICU, CCU, Minimal, Etc.)**
  - **Staffing and Throughput Available**
- **Medical and Non-Medical Supplies**
- **Transportation Assets (Include Medical Specific)**

## **Resource Providers**

- **DHS (NDMS)**
- **DHHS Resources**





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